REMARKS:

This paragraph is added to explain that the nano-structures do not have to be distributed over and along cathodes in patches in order for the electron source or display to be addressable, even though in the two detailed embodiments they are shown in patches. It is also to draw attention to the fact that when the embedding materials is a conducting material, the emitting layer can not be continuous over the entire substrate if the cathode is configured as multiple independent electrodes.

2. Claim

a. [c19]

An electron source as recited in claim 1,

wherein the first cathode electrode is configured as a plurality of electrically isolated cathode electrodes, each for supplying an independent source of electrons;

~~wherein the nano-structure in the emitter layer is distributed in a pattern of a plurality of patches along the cathode electrodes;~~

wherein the second gate electrode is configured as a plurality of electrically isolated electrodes, each intersecting with the said plurality of cathode electrodes ~~at the said patches of nano-structures,~~ and having one or a plurality of apertures aligned with the apertures in the said insulator at the intersections, each gate electrode for controlling the emission of electrons through the apertures along the gate electrode;

activation of a selected cathode and a selected gate electrode determines an~~the~~ intersection where the ~~patch of~~ nano-structures ~~that~~ emit electrons.

b. [c 23]

A display as recited in claim 20,

wherein the first cathode electrode is configured as a plurality of strip-like cathode electrodes extending substantially in the same direction in such a manner as to be spaced from each other at intervals in the transverse direction, each cathode strip for providing an independent source of electrons;

~~wherein the nano-structure in the emitter layer is distributed as a plurality of patches deposited over and along each cathode electrode;~~

wherein the second gate electrode is configured as a plurality of strip-like gate electrodes extending in such a manner as to intersect the said plurality of cathode electrodes ~~at each said patches of nano-structures~~ and to be spaced from each other at intervals in the transverse direction, and having one or a plurality of apertures aligned with the apertures in said insulator at the intersections, each gate electrode for controlling the emission of electrons through the apertures along the gate electrode; and

wherein the anode electrode is configured as a plurality of strip-like anode electrodes each extending in such a manner as to be opposed to the corresponding one of the said second gate electrodes.

d. Add the following claims

[c33]

A method of growing one or a plurality of mono-dispersed nano-structures of predetermined diameter and average spacing to be used as field emission emitters, the method comprising:

providing a proper substrate that is ready to accept growth of nano-structures;

laying down a mask over the said substrate, the mask consisting of a thin sheet of material punctuated with one or a plurality of fine pores of desired diameter and average spacing between pores;

depositing one or a plurality of catalyst dots on the substrate through the said mask;

removing the mask;

growing one nano-structure from each said catalyst dot.

[c34]

A method as recited in claim 33,

wherein the mask includes ion-track etched membranes and membranes formed from etching using an ion-track-etched membrane as a mask.

[c35]

A method as recited in claim 34, wherein the ion-track etched membrane is pre-fabricated.

[c36]

A method as recited in claim 34,

wherein the ion-track etched membrane is fabricated on the substrate by: coating the substrate with a solid film, and subjecting the coated substrate to ion tracking and etching processes to form fine pores in the film.